

PATENT APPLICATE

UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

SAMUEL A. COOPER et al.

Serial No.:

09/583,629

Filed:

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For:

COATING METHODS AND

APPARATUS FOR COATING

Examiner:

Group Art Unit: 1762

Docket No.

FSI0030/US

Commissioner for Patents Washington, D.C. 20231

I CERTIFY THAT, ON (WY 19, 2002, THIS PAPER IS BEING DEPOSITED WITH THE U.S. POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO THE COMMISSIONER FOR PATENTS, WASHINGTON, D.C. 20231.

INFORMATION DISCLOSURE STATEMENT

Pursuant to the duty of disclosure imposed by 37 C.F.R. § 1.56 and in accordance with the provisions of 37 C.F.R. §§ 1.97, 1.98 and the Manual of Patent Examining Procedure 609, Applicants bring to the attention of the Examiner the following information. The Examiner's independent and thorough review of this information is solicited.

Attached hereto please find Form PTO-1449 listing printed references. Copies of references are also enclosed. The Examiner is requested to indicate consideration of the references by initialing in the appropriate box for each reference and returning an initialed copy with the next official action.

Applicants would also like to bring to the attention of the Examiner the following copending applications:

- U.S. Serial No. 08/961,175, filed October 30, 1997, entitled "Liquid Coating 1) Device with Barometric Pressure Compensation"; and
- U.S. Serial No. 09/397,714, filed September 16, 1999, "Liquid Coating 2) Device with Barometric Pressure Compensation."

With regard to the above-identified application, potential disclosure or sales activity more than one year prior to the filing date of the application is brought to the attention of the Examiner. To complete Applicants' duty to bring to the Examiner's attention any

information that may have an impact on the Examiner's consideration of patentability, Applicants include in this Information Disclosure Statement facts surrounding such potentially relevant sale or disclosure.

- In January 1999, an FSI POLARIS® 2500 microlithography cluster semiconductor processing system ("The System"), was delivered for sale to a third party. That system was the first delivered system to contain hardware and software that allowed process control using "Synchronization." By "Synchronization" what is meant is process control that is capable of using an interrupt signal to interrupt sequential process control to execute a process command, e.g., as described in claim 1 of the above-identified patent application.
- 2) The System included a coat station for spin coating photoresist material onto a substrate. The System included hardware that allowed for Synchronization control at the coat station during processing. The System also included software that included available commands that could be and were used to operate The System using Synchronization control of the coat station.
- 3) The system included a develop station for spin coating developer material onto the substrate. The System included hardware that allowed for Synchronization control of the develop station during processing. The System also included software that included available commands that could have been used to operate The System using Synchronization control of the develop station.
- 4) Installation of The System began on approximately February 8, 1999, and was completed on approximately March 3, 1999.

- 5) During qualification of The System, prior to approximately May 31, 1999, the software was programmed to use Synchronization control during processing at the coat station.
- 6) Prior to May 31, 1999, The System's software was not programmed to operate using Synchronization control at the develop station and was not used to perform methods of coating developer solution with synchronization control. In fact, while commands existed and were available in the software to allow Synchronization control of The System's develop station during spin coating of developer solution, implementation of a Synchronization process control setup for the develop station would have required identification of a proper series of program steps, which, Prior to May 31, 1999, FSI had not identified. Prior to May 31, 1999, FSI had not specifically determined whether Synchronization control of the developer solution was possible, or whether it would have been useful, beneficial, advantageous, or necessary. Moreover, the customer that purchased The System was not aware of the technical aspects of Synchronization control of the develop station and would not have been able to have set up, programmed, or used The System with Synchronization control of the develop station. And, the sale of The System was not based on the advantage of using Synchronization control at the develop station – qualification of The System, to the customer's satisfaction, was complete without Synchronization control of the develop station.

This Information Disclosure statement is filed pursuant to 37 C.F.R. § 1.56 to bring to the Examiner's attention information that might be material to the Examiner for examination of the above-identified patent application. However, the disclosure of information identified in this Information Disclosure Statement is not intended to constitute an admission that anything referred to herein is "prior art" or constitutes a public release, disclosure, sale, or offer of sale of subject matter of the above-identified patent application.

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In this regard, Applicants expressly reserve the right to contest that any information referred to herein constitutes prior art or a public release, use, sale, or offer for sale of the invention.

Consideration of the information is respectfully requested.

No fee is believed to be necessary for the consideration of this Information Disclosure Statement since it is being filed before the receipt of an Office Action on the merits. However, if a fee is required, please charge our Deposit Account No. 50-1775 and notify us of the same.

Respectfully Submitted,

D.,,

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